#### **ROCKY LAKE UNIT**

## 1. Character of the Landbase

The 11,121-acre Rocky Lake Unit is located approximately 11 miles north of East Machias on Route 191, and is comprised mostly of the southern half of T18ED BPP in southern Washington County. The property came to the state through several land trade and acquisition transactions in 1977-78 with International Paper Company and St. Regis Paper Company, and in 1984-85 with Georgia-Pacific Paper Company. Two additional parcels were acquired in 2004, including a 59-acre island in Rocky Lake, and a 70-acre parcel (known as "the mitten") abutting the East Machias River near the outlet of Second Lake. Both parcels were acquired from International Paper Company. Embedded in the Unit are the original public lots for T18 ED, encompassing an area between the west shore of Rocky Lake and the east shore of Second Lake.

The Management Unit also includes two parcels on the southwestern shore of Patrick Lake in Marion Twp., located three miles east of Rocky Lake on Route 86; a 115-acre parcel acquired from Baskahegan Company in 1984, and an abutting 2-acre parcel acquired in 2004 used primarily as a boat access site. The larger parcel contains a parking area and footpath to the lakeshore, and has been managed for day use.



The Unit is typical of Eastern Maine glacial landscapes with rocky, jagged-edged lakes, divided by low ridges that provide some relief to the otherwise level landscape. Meandering streams and rivers are bordered by abundant natural wetlands. Rocky Lake (1,555 acres), Second Lake (pictured, 332 acres), and Patrick Lake (275 acres), all warm water lakes - along with the East Machias River - are the principal features on the Unit. Rocky Lake and Second Lake are separated by Rocky Lake Ridge and are connected off the Unit by Rocky Lake Stream,

which flows north and west into the East Machias River. From here the river enters into Second Lake, and eventually into Hadley Lake south of the Unit. The Unit includes many public islands on Rocky Lake, while others remain in private ownership.

One of the principal uses of this Unit is public recreation in conjunction with the lakes and river. Activities including fishing, boating, swimming, canoeing, camping, hunting, trapping, picnicking, bird watching, and snowmobiling. Portions of the road system have been designated for ATV and snowmobile trail use, providing important regional connections.

The timber resource on this Unit contains a high percentage of young trees. The area was extensively harvested from the 1950's through 1977 when it was acquired by the State. In the late 1970's and early 1980's, the spruce budworm infestation caused extensive mortality and defoliation to the softwoods, which have since naturally regenerated with young fir, spruce, and white pine.

Wildlife species found on this Unit are numerous. The abundant natural wetlands provide habitat for waterfowl and furbearers; the lakes provide warm water fisheries, and the dense young softwood growth provides key habitat for snowshoe hare, bobcat, deer, and coyote. Also found in lesser numbers are fisher, moose, and bear.

The Unit is bounded primarily by industrial forestlands. GMO Renewable Resources (formally International Paper) is the principle owner to the north, with Wagner Forest Management a significant abutter to the east.

A management plan for the Rocky Lake Unit was developed and adopted in 1989.

### 2. Resources and Management Issues

#### NATURAL AND GEOLOGICAL RESOURCES

Upland forests within the Unit are typical of the region, with nearly all areas showing past evidence of timber harvesting, fire, and budworm damage. Mid-successional softwoods (spruce and fir, with pockets of cedar) are dominant throughout the Unit. On a large knoll east of the Machias River, early and mid-successional hardwoods (poplar, red maple) are transitioning into an oak-pine forest.

Approximately 68% of the Unit is forested upland, while the remainder is forested wetland (20%), non-forested wetland (10%), and open water (2%). Notable natural areas on the Unit include two small well-formed, raised Sheep Laurel-Dwarf Shrub Bogs on the east side of Second Lake. A large wetland complex on the western shore of Rocky Lake consists of Spruce-Larch Wooded Bogs and Northern White Cedar Woodland Fens with a small Sheep Laurel-Dwarf Shrub Bog in an open area of the wetland. A 1,500-acre wetland-dominated area along the East Machias River has been designated as an Ecological Reserve.

In the south-central portion of the Unit, a Tussock Sedge Meadow dominates a wetland complex controlled by beavers. The surrounding forest was harvested a few decades ago; however, several very large red maples and a white pine 39 inches in diameter were found near the southern portion of the meadow.

The largest exemplary natural community on the Unit, a Streamshore ecosystem (emergent marsh) covering several hundred acres, is located along the East Machias River within the designated Ecological Reserve. No rare plants, however, have been discovered on Unit.

The first Natural Resource Inventory for the Unit was completed in 2004.

### HISTORIC AND CULTURAL RESOURCES

*Cultural Resources*. No formal archaeological studies have been conducted on the Rocky Lake parcel; however, access by canoe from other waterways makes it a likely source of archaeological resources from Native American periods.

*Nomenclature.* Smith Mill Pitch on the East Machias River was named for the Smith family who once operated a mill in the area; Wigwam Riffles on the East Machias River near Second Lake was named as a result of a nearby Native American encampment.

# Summary of Management Issues and Concerns

• The shorelines of Rocky Lake, Second Lake, and the East Machias River are areas likely to have been used by Native Americans for campsites; any active management will require consultation with and cooperation from the Maine Historic Preservation Commission.

#### FISHERIES AND WILDLIFE RESOURCES

The peninsula between Northern Inlet and South Bay on Rocky Lake contains two active eagle nests. Eagles are common throughout the Unit and utilize the superstory white pines along rivers and lakeshores for nesting, roosting, and perching. Shallow wetlands provide ideal foraging areas. Another eagle nest is located on private land just across the river near Second Lake. The ¼ mile circle around this nest encompasses part of the recently acquired "mitten" west of Second Lake. Although the bald eagle, as a species, is scheduled to be removed from the threatened status, protecting habitat and nest sites on public land will be important in maintaining eagle productivity in the future.

The Rocky Lake Unit contains extensive wetlands, many of which provide important wading bird habitat mapped by the Maine Department of Inland Fisheries and Wildlife. The three lakes in the Unit support a warm water fishery of bass, pickerel, and perch.

A 205-acre zoned Deer Wintering Area is located along the eastern shoreline of Rocky Lake, although there has been no documented use by deer within the last 10 years.

The East Machias River and Second Lake provide important Atlantic salmon habitat. Most of the shoreline on both sides of the river is designated as an Ecological Reserve. The river segments salmon rearing and spawning habitat (riffle areas) as mapped by the U.S. Fish and Wildlife Service.

Brook floater mussels, a species of special concern, and Tomah mayflies, a globally rare species, have been found on the East Machias River below Rocky Lake Stream. Though both of these locations are north of the Plan area, similar habitat is found within the Unit.

### Summary of Management Issues and Concerns

- There has been no documented deer use of the LURC-zoned DWA on the southeast shore of Rocky Lake in the last 10 years.
- The East Machias River and Second Lake have been identified as important Atlantic salmon habitat
- Although floater mussels and Tomah mayflies have been located on other lands in the area, similar habitat has been found on the Unit.

### RECREATION AND VISUAL RESOURCES

Rocky Lake, Second Lake, and Patrick Lake are the principal recreation features on the Unit; visitors enjoying fishing, boating, ATV riding and snowmobiling, swimming, camping, hunting, trapping, picnicking, and wildlife watching in conjunction with these lakes. Second Lake and the East Machias River also form part of a popular 39-mile canoe trip from Pocomoonshine Lake to Hadley Lake – 4 miles of which are within the Unit. Several side trips are possible along this

route, including one to Rocky Lake along Rocky Lake

Stream.

# Camping and Day Use Areas

Two areas on the Rocky Lake Unit provide vehicle access to recreation facilities. One is located on Rocky Lake at

the South Bay public use area, and includes 4 campsites with fire ring, picnic table, and privy. The area also includes facilities for picnicking and boat access. Public use of this area has been heavy at times, occasionally resulting in vandalism and the indiscriminate cutting of live trees for firewood. Another public use area is located at Mud Landing on the Northern Inlet of Rocky Lake (pictured), and includes facilities for a single-party campsite, picnicking, and boat access. Fire permits are not required at these locations. General improvements to these areas to correct safety, ease-of-use issues, and increasing demand are needed. There is also a small day use area adjacent to the boat landing on Patrick Lake, located a short walk from a parking area along side of Route 86 in Marion Twp.

Single-party, water-access campsites with no facilities are found at two locations on Second Lake, and one location on the East Machias River. Campfires are allowed on these sites provided a fire permit from the Maine Forest Service is obtained in advance. A site used for hand launching of small boats located on the south end of Second Lake has also been used for camping. Several other informal campsites, often used by canoeists, are located on the shoreline of Second Lake and along the river. Fire permits are not issued for these sites. A single-party, water-access campsite is located at Loose Rock on the southwest shore of Rocky Lake. This site has a fire ring, two picnic tables, privy, and an Adirondack shelter constructed by the Maine Conservation Corps in 1981. Four campsites with table, fire ring, and backcountry toilet are located along other areas of the lake and islands. These sites are authorized for campfire use without obtaining a permit. Further development or upgrading of recreation facilities along the shorelines of the lakes and river will be difficult due to poor soil suitability, particularly for sanitary facilities.

# Multiple Use/Motorized Trails

Snowmobiling and ATVing constitute the principal trail uses of the Unit, with 17 miles of Shared Use Roads and approved motorized trails. The snowmobile trail is a groomed trail, and



eventually connects to ITS 84, a major east-west trail north of the Air Line (Route 9). Snow conditions in the region vary from year to year limiting snowmobile opportunities in comparison to other areas of the state. In years where cover is sufficient, a 6-week use season is typical. Both the ATV and snowmobile trail systems provide important connections to regional destinations, including the 700-mile ATV trail system on private lands nearby. In the past, the Bureau has worked with local trail groups on the location and maintenance of the trails, and to address ongoing

issues with safety, connectivity, and use conflicts. Providing trail-side campsites for motorized users has also been discussed relative to the future management of the Unit. The Calais Branch trail corridor, approved for development by the Maine Department of Transportation as a multiuse trail for both motorized and non-motorized uses, passes through the southeast corner of the Unit east of Route 191, where it crosses the Southern Inlet (pictured left). The trail would provide a new access point at this location. The Bureau will need to coordinate the development and management of the trail with respect to its impacts on the Unit, and with the stated objectives of this Plan..

In the past, demand for bicycling and horseback riding areas has not been significant; although there is growing interest in providing opportunities for their use.

#### **Boat Access**

Boat access takes place on four areas within the Unit; a graveled site on the Northern Inlet of Rocky Lake, suitable for trailered launching but in need of upgrading; a graveled site on Rocky Lake at the South Bay recreation area, where the launching of trailered boats has been difficult



due the rockiness and shallowness of the site; a graveled site on Patrick Lake suitable for trailered launching; and a walk-to hand carry site on the southern shoreline of Second Lake. This site, located at the end of an old road to the lake from the Diamond Match Road (pictured left), has



been considered for relocation to the old

Doc Henry camp site (pictured right) due to long-standing environmental impacts resulting from indiscriminate use of this road, and to further protect Atlantic salmon habitat. Boat launching on Patrick Lake takes place

off from Route 86 on a graveled site suitable for trailered boats.

Visual Considerations. Management activities typically consider visual resources when planned and implemented. The scenic quality of the Rocky Lake Unit is valued by visitors to the area, particularly as viewed from public use areas, trail corridors, and the various waterbodies within the Unit.

### Summary of Management Issues and Concerns

- The parking, boat launching, and camping facilities at Mud Landing on the Northern Inlet require upgrades to improve safety and convenience.
- Indiscriminate use of the camping facilities at South Bay on Rocky Lake, along with the cutting of live trees, has negatively impacted the area, both environmentally and socially.
- Recent improvements to the Diamond Match Road provide two-wheeled access to Second Lake.
- There is a need address ongoing connectivity and safety concerns with the motorized trail systems.
- The Bureau has been asked to consider providing horseback riding and bicycling opportunities on the Unit.
- The location of the designated hand carry site on Second Lake presents ongoing environmental issues; alternative sites need to be considered.
- The Calais Branch trail corridor will be developed for use by ATVs, snowmobiles, bicycles, and others. A portion of this corridor passes through the southeast corner of the Unit, and will provide a new access point to the Unit.

### TIMBER AND RENEWABLE RESOURCES

The Rocky Lake Unit in general is less hilly than elsewhere in the Plan area, with the major constraints to timber management being the numerous wetlands and occasional boulder fields. Impacts from the budworm infestation and resulting salvage harvests were substantial here, but there is significant regeneration occurring. The younger trees include an abundance of spruce

and pine, ready to respond to release from overstory competition. A large portion of the Unit is well suited for long-term timber management for this reason

### Stand Type Characteristics

Softwood types are found mainly on dry sites or in wetlands. The drier areas have higher densities of spruce and hemlock, and are mixed with significant pine; the wetter sites are mostly dominated by cedar of poor quality, with some areas having greater densities of spruce and hemlock. The best timber opportunities consist of ensuring growing space for high quality spruce and pine, with hemlock increasing in importance on the more fertile areas.



Mixedwood types occupy almost 60% of this area, but much of this type is on land better suited to softwoods, where the softwoods were either harvested or killed by budworm 20-30 years ago. The hardwood component is mostly of low quality, dominated by red maple and white (or hybrid white/gray) birch. The softwood portion of these mixedwood stands is mainly spruce/fir and hemlock with significant pine, and is generally of better quality than the hardwoods. Improvements in the hardwood pulp market at the time of recent harvests offered the chance to preferentially remove the poorly formed stems and favor quality softwoods in the residual stands.

Hardwood types cover only 10% of this Unit, and much of this area was mixedwood or softwood prior to the budworm infestation. These stands hold poorly formed maples and birches that in most areas overtop fine softwood-dominated seedlings and saplings. There is a small proportion of the hardwoods not fitting this description, being either true Northern Hardwoods (birch-beechmaple) or holding significant oak, which is generally the best quality hardwood wherever it is found. Timber opportunities here include the same hardwood removals as in mixedwood, favoring oak where it occurs.

Since 2003, approximately 940 acres have been treated, with nearly ½ the harvest volume being low-quality hardwood sent to the Domtar pulp mill in Baileyville. This volume also qualified under the Forest Stewardship Council's "green-certified wood" program.

### Summary of Management Issues

- There is considerable public vehicle and recreational use of recently improved roads constructed for timber management. This will have to be considered in planning present and future harvests.
- Management of the forest within the Unit provides a challenge in that the much of the
  merchantable trees in the overstory are of low quality, whereas the younger trees in the
  understory tend to be of higher quality.

### TRANSPORTATION AND ADMINISTRATIVE CONSIDERATIONS

Public Use and Management Roads, Gates and Road Control

The Diamond Match Road from Route 191 just north of the East Machias town line provides the primary access into the interior of the Unit. The one and one-half mile section of road from Route 191 to South Bay is designated as a public use road. The remainder of the road, into Second Lake and beyond, is classified as a management road, although improvements to this road were made in preparation for winter harvesting activities in 2004.

The Northern Inlet Road, just over a mile north of the entrance to the Diamond Match Road on Route 191, provides access to the Northern Inlet boat launching and camping area. This road is also designated as a public use road. The Nineteen Road, just north of the Northern Inlet Road is used as a motorized trail, and provides vehicle access to the northeast corner of the Unit where it then passes onto private land.

A gate is located on the on a management road north of the Diamond Match Road along the east side of Second Lake, prevents vehicular traffic onto the road, which is designated for motorized trail use.

### Leases and Agreements

There are five residential camplot leases located on the Unit, located on the west shore of Rocky Lake, near the southwest segment of the East Machias River, and in the interior of the Unit east of the river. The Bureau has a statutory obligation to continue these leases provided the terms and conditions are met.

### Fire Control

The Bureau's Integrated Resource Policy states "Wildfires occurring on or spreading to Bureau lands will be controlled." (pages 12-17). The Bureau will continue to coordinate with the Maine Forest Service in planning for the prevention and control of forest fires on the lands that it manages. Such efforts will be undertaken on a regional basis, to ensure Bureau staff can respond adequately and quickly to fire emergencies.

## 3. Resource Allocations and Management Recommendations

### SPECIAL PROTECTION AREAS (see map RL-1)

**Special Protection as a Dominant Use.** The Special Protection allocation as a dominant use will apply to the 1,500-acre wetland-dominated area along the East Machias River by virtue of its designation as an Ecological Reserve.

Secondary Uses Within Special Protection Areas. The portion of the Ecological Reserve along the East Machias River is suitable for Remote Recreation activities, which is an allowed secondary use within this designation. Use of this area primarily involves canoeing on the river, as well as hunting, fishing, and trapping. Timber harvesting is not permitted in the Ecological Reserve.

# Management Recommendations

• Monitor recreational uses within the Ecological Reserve area along the East Machias River for compatibility with the values and resources being protected.

# WILDLIFE MANAGEMENT AREAS (see map RL-2)

Wildlife Management as a Dominant Use. The areas within 1320 feet of 2 bald eagle nests (outlet of Second Lake and tip of peninsula in Rocky Lake) and the deer wintering area on Rocky Lake have been allocated as Wildlife Dominant. Areas within 75 feet or 330 feet of rivers, streams or brooks have been allocated as Wildlife Dominant except where higher allocations apply. The management objective in these areas is to maintain or establish multi-aged forest stands as habitat and as travel corridors for wildlife; in particular where it supports Atlantic salmon preservation efforts.

Secondary Uses within Wildlife Dominant Areas. Recreation and timber management are allowed secondary uses in Wildlife Dominant areas. There may be seasonal limitations on certain recreational activities and timber harvesting during critical nesting periods.

### Management Recommendations

- Continue efforts to establish or encourage softwood growth on suitable softwood sites throughout the Unit.
- Explore and implement ways to enhance the habitat conditions within the Rocky Lake deer wintering area, and monitor for use.
- Continue to look for ways to enhance Atlantic salmon habitat.

## RECREATION AREAS (see map RL-3)

**Remote Recreation as a Secondary Use.** Remote Recreation has been allocated as a secondary use along the shorelines of Rocky, Second, and Patrick Lakes, as well as the shoreline of the East Machias River. The primary recreational activities in these areas include canoeing, boating, primitive camping, fishing, and hunting.

**Developed Recreation as a Dominant Use.** The Developed Class I allocation (where more intensely-developed recreation facilities may be found) as a dominant use have been applied to:

- Public use roads, including portions of the Diamnond Match Road and the Northern Inlet Road
- Motorized trails, including the Diamond Match Road to Second Lake, the gated trail east of Second Lake to where it abuts private land near Munson Rips, and a portion of the Nineteen Road.
- South Bay public use area on Rocky Lake
- Mud Landing public use area on the Northern Inlet
- Boat launching area on Patrick Lake.

### Management Recommendations

- The Diamond Match Road beyond Second Lake will remain a management road, but will be maintained to permit vehicle access to a public parking area near the former "Doc Henry" camp on Second Lake. This site will also be used to relocate the hand carry launch site..
- Continue work with local trail clubs towards managing and improving the motorized trail network in the Unit. Trail relocations will be considered to minimize safety issues, enhance connectivity, and minimize conflicts with other users.
- Destinations within the Unit for motorized trail users will be explored, including the use of an existing campsite along the west shore of Rocky Lake and a campsite west of the Northern Inlet.
- Improvements to the South Bay boat landing will be explored to enhance its capacity to launch trailered boats.
- A strategy to deter vandalism and other negative impacts from the use of the South Bay and Mud Landing recreational areas will need to be implemented.
- Improvements to the Mud Landing parking area will be made to better accommodate general day use, camping, boat launching, and parking.
- Additional opportunities for remote camping on the lakes and the river within the Unit will be explored.
- Work with the Bureau's Off-Road Vehicle Division on the development and management of the Calais Branch trail corridor. Explore opportunities and potential impacts resulting from its use, as it relates to creating a new access point into the Unit.

*Visual Areas as a Dominant Use*. A Visual Class I designation will apply on lands adjacent to all public use roads, public use areas, and motorized trails throughout the Unit to address foreground aesthetics within these corridors. Visual Class II designations will apply along shorelines and upland view shed areas as seen from the lakes and river.

# TIMBER MANAGEMENT AREAS (see map RL-4)

**Timber Management as Dominant Use.** Much of the Rocky Lake Unit has been allocated as Timber Dominant.

Timber Management as a Secondary Use. Areas allocated for Wildlife, Remote Recreation, and Visual Areas provide for timber management as a secondary use. Further limitations may apply on Second Lake due to its importance for Atlantic salmon habitat. Any management in this area will focus on maintaining stand integrity in support of this habitat.

## Management Recommandations

• Manage for high value softwoods (spruce, pine, and hemlock on the more fertile sites) and for deer winter cover. True Northern Hardwood type (birch/beech/maple) should be retained wherever the soils are fertile enough to support its growth. Oak should be retained and encouraged wherever possible.